**COMMONWEALTH OF VIRGINIA**
**Department of Environmental Quality**
**Piedmont Regional Office**

## STATEMENT OF LEGAL AND FACTUAL BASIS

Virginia Electric and Power Company
Dominion – Darbytown CT Station
6001 Fergus Boulevard, Richmond, Virginia
Permit No. PRO50997

Title V of the 1990 Clean Air Act Amendments required each state to develop a permit program to ensure that certain facilities have federal Air Pollution Operating Permits, called Title V Operating Permits. As required by 40 CFR Part 70 and 9 VAC 5 Chapter 80, Virginia Electric and Power Company has applied for a Title V Operating Permit for its Dominion – Darbytown CT Station facility. The Department has reviewed the application and has prepared a draft Title V Operating Permit.

Engineer/Permit Contact: Jennifer Hoeffner Date: 5/7/13
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Air Permit Manager: Date: 5/7/2013
James E. Kyle, P.E.

Deputy Regional Director: Date: 5/7/13
Kyle Ivar Winter, P.E.

## FACILITY INFORMATION

Permittee
Virginia Electric and Power Company
5000 Dominion Boulevard
Glen Allen, Virginia 23060

Facility
Dominion – Darbytown CT Station
6001 Fergus Boulevard
Richmond, Virginia 23231

County-Plant Identification Number: 51-087-0156

## SOURCE DESCRIPTION

NAICS 221112 – Electric Power Generation
SIC 4911 – Electrical Services

The Virginia Electric Power Dominion – Darbytown CT Station is an electric power generation facility. Natural gas is received via gas pipelines to operate up to four General Electric Model PG711-EA simple cycle turbines each rated at 1,308 MMBtu/hr on natural gas. No. 2 fuel oil is also available to fire any or all of the turbines, which are rated at 1,250 MMBtu/hr on No. 2 fuel oil.

The turbines were originally installed in 1989 and all turbines are subject to the requirements of 40 CFR 60, Subpart GG. The facility is a Title V major source of $SO_2$ and $NO_X$ pollutants. This source is located in an attainment area for all pollutants and is a minor source under PSD regulations. The area is in VOC and NOx control areas. The facility was originally permitted under a minor NSR permit issued on September 7, 1989. Since then, this permit and the Title V permit have been amended as follows:

- May 1, 2000 - The facility was modified to add inlet air-cooling.
- January 10, 2003 - Permit amended to clarify ambiguous terms relating to the operation of the inlet air cooling system.
- June 1, 2003 – Title V issued.
- December 1, 2003 – Title V amended to add $NO_X$ Budget Program.
- September 16, 2004 – Title V amended to further clarify periodic monitoring of the turbines.
- May 27, 2005 – Permit amended to add in Appendix A from NSPS, Subpart GG.
- July 14, 2005 – Title V amended to add in Appendix A from NSPS, Subpart GG.
- March 28, 2008 – Permit amended to install and operate wet compression systems.
- March 5, 2013 – Permit amended to remove obsolete requirements and make other updates.

The current permit action is for the renewal of the Title V Operating Permit. An application for permit renewal was received on November 26, 2012 by the Virginia Department of Environmental Quality (the Department) and was deemed administratively complete January 14, 2013.

## COMPLIANCE STATUS

A full compliance evaluation of this facility, including a site visit, has been conducted. In addition, all reports and other data required by permit conditions or regulations, which are submitted to DEQ, are evaluated for compliance. Based on these compliance evaluations, the facility has not been found to be in violation of any state or federal applicable requirements at this time.

## EMISSION UNIT AND CONTROL DEVICE IDENTIFICATION

The emissions units at this facility consist of the following:

| Emission Unit ID | Stack ID | Emission Unit Description | Size/Rated Capacity | Pollution Control Device (PCD) Description | PCD ID | Pollutant Controlled | Applicable Permit Date |
|---|---|---|---|---|---|---|---|
| Fuel Burning Equipment | | | | | | | |
| ES-1a | EP-1 | General Electric PG7111-EA Turbine Unit 1 firing gas | 1308 MMBtu/hr | water injection | CD-1 | $NO_X$ | 3/5/13 |
| ES-1b | EP-1 | General Electric PG7111-EA Turbine Unit 1 firing oil | 1250 MMBtu/hr | water injection | CD-1 | $NO_X$ | 3/5/13 |
| ES-2a | EP-2 | General Electric PG7111-EA Turbine Unit 2 firing gas | 1308 MMBtu/hr | water injection | CD-2 | $NO_X$ | 3/5/13 |
| ES-2b | EP-2 | General Electric PG7111-EA Turbine Unit 2 firing oil | 1250 MMBtu/hr | water injection | CD-2 | $NO_X$ | 3/5/13 |
| ES-3a | EP-3 | General Electric PG7111-EA Turbine Unit 3 firing gas | 1308 MMBtu/hr | water injection | CD-3 | $NO_X$ | 3/5/13 |
| ES-3b | EP-3 | General Electric PG7111-EA Turbine Unit 3 firing oil | 1250 MMBtu/hr | water injection | CD-3 | $NO_X$ | 3/5/13 |
| ES-4a | EP-4 | General Electric PG7111-EA Turbine Unit 4 firing gas | 1308 MMBtu/hr | water injection | CD-4 | $NO_X$ | 3/5/13 |
| ES-4b | EP-4 | General Electric PG7111-EA Turbine Unit 4 firing oil | 1250 MMBtu/hr | water injection | CD-4 | $NO_X$ | 3/5/13 |
| Degreasing Operations | | | | | | | |
| ES-5 | ES-5 | Miscellaneous Parts Washer | Various | None | None | VOCs | N/A |

## EMISSIONS INVENTORY

A copy of the 2011 annual emission update is attached. Emissions are summarized in the following table.

2011 Actual Emissions

| 2011 Criteria Pollutant Emission in Tons/Year | | | | | |
|---|---|---|---|---|---|
| **Emission Unit** | **VOC** | **CO** | **$SO_2$** | **$PM_{10}$** | **$NO_X$** |
| ES-1a | 0.3 | 0.006 | 0.0 | 1.0 | 0.0 |
| ES-1b | 0.0002 | 0.007 | 0.2 | 0.008 | 21.1 |
| ES-2a | 0.2 | 0.005 | 0.0 | 0.8 | 0.0 |
| ES-2b | 0.006 | 0.007 | 0.1 | 0.008 | 18.0 |
| ES-3a | 0.2 | 0.005 | 0.0 | 0.8 | 0.0 |
| ES-3b | 0.0006 | 0.01 | 0.2 | 0.01 | 17.8 |
| ES-4a | 0.3 | 0.006 | 0.0 | 0.9 | 0.0 |
| ES-4b | 0.0003 | 0.009 | 0.2 | 0.01 | 21.0 |
| **Total:** | **1.2** | **0.06** | **0.7** | **3.7** | **77.9** |

No significant HAP emissions.

## EMISSION UNIT APPLICABLE REQUIREMENTS – [Emission Units: ES-1a, ES-1b, ES-2a, ES-2b, ES-3a, ES-3b, ES-4a, ES-4b, and ES-5]

The Title V emission requirements are based on the following: the Minor NSR permit issued on March 5, 2013, 40 CFR Part 60 Subpart GG, Standards of Performance for Stationary Gas Turbines, Commonwealth of Virginia's Rule 4-24- Emission Standards for Solvent Metal Cleaning Operations Using Non-Halogenated Solvents, 40 CFR Part 96, the Clean Air Interstate Rule (CAIR) and 9 VAC 5-80-50 *et seq.*, Part II-Article 1 Federal Operating Permit for Stationary Sources.

## FUEL BURNING EMISSION UNIT APPLICABLE REQUIREMENTS – [Emission Units: ES-1a, ES-1b, ES-2a, ES-2b, ES-3a, ES-3b, ES-4a, and ES-4b]

### Limitations

The condition numbers listed below are from the Minor NSR permit issued on March 5, 2013 and conditions are also from NSPS, Subpart GG.

Condition 2, nitrogen oxide emissions are limited through the use of water injection as a control device.

Condition 3, sulfur dioxide emissions are limited through the use of low sulfur fuels as a control device.

Condition 4, particulate matter emissions are limited through the use of clean burning fuels and good combustion operating practices.

Condition 5, volatile organic compounds and carbon monoxide emissions are limited through the use good combustion practices.

Condition 6, the control system for each inlet air cooling system and each wet compression system are limited through the use of interlocks.

Condition 12, each inlet air cooling system and each wet compression system is limited through the use operating restrictions.

Condition 13, fuels for the turbines are limited to natural gas and distillate fuel.

Condition 15, the sulfur content of the natural gas burned in the turbines is limited to 0.06 weight percent.

Condition 16, the sulfur content of the distillate fuel burned in the turbines is limited to 0.2 weight percent per shipment and the fuel bound nitrogen content is limited to 0.05 weight percent per shipment.

Condition 14, the combined consumption of natural gas and distillate fuel by the turbines is limited annually and calculated monthly as the sum of each consecutive 12 month period, as follows:

Natural gas – limited to 3,100,000,000 scf annually when firing natural gas 100% of the time.

No. 2 distillate oil – limited to 13,600,000 – 2,100,000 * (FBN – 0.015/0.035) gallons annually when firing No. 2 distillate oil 100% of the time. Fuel Bound Nitrogen (FBN) is equal to % FBN by weight annual average, but not less than 0.015% firing No. 2 distillate oil 100% of the time.

When the four simple cycle combustion turbines are firing both No. 2 distillate oil and natural gas during the period individually or in combination, the annual consumption shall be limited by the following equation to limit $NO_X$ and $SO_2$ to less than 250 tons per year, where: (scf natural gas used/ 3,100,000,000 scf) + (gallons of No. 2 distillate oil used/ No. 2 distillate oil limit in gallons from b.) is less than or equal to 1.

Condition 17, short-term emissions from each of the turbines while fired on natural gas is limited as follows (except during start-up, shutdown and malfunction conditions):

| | | |
|---|---|---|
| PM | | 6.3 lbs/hr |
| PM-10 | | 6.3 lbs/hr |
| $SO_2$ | $5.1 \times 10^{-2}$ lbs/MMBtu | 66.0 lbs/hr |
| $NO_2$ | 42 ppmdv @ 15% $O_2$ | 199.4 lbs/hr |
| VOC | | 2.0 lbs/hr |
| CO | | 26.5 lbs/hr |

Condition 18, short-term emissions from each of the turbines while fired on distillate fuel oil is limited as follows (except during start-up, shutdown and malfunction conditions):

| | | |
|---|---|---|
| PM | | 12.5 lbs/hr |
| PM-10 | | 12.5 lbs/hr |
| $SO_2$ | $2.0 \times 10^{-1}$ lbs/MMBtu | 253.7 lbs/hr |
| $NO_2$ | 65* ppmdv @ 15% $O_2$ | 321.6 lbs/hr |
| *(Fuel Bound Nitrogen less than 0.015% by weight) | | |
| $NO_2$ | 77** ppmdv @ 15% $O_2$ | 381.4 lbs/hr |
| **(Fuel Bound Nitrogen less than 0.05% by weight) | | |
| VOC | | 6.3 lbs/hr |
| CO | | 28.6 lbs/hr |

Condition 19, "start-up" and "shutdown" are limited as defined.

Condition 21, visible emissions are limited to 10% opacity except during one six-minute period in any one hour in which visible emissions are limited to 30% opacity.

Condition 22, Except where the Title V permit is more restrictive than the applicable requirement, the simple cycle combustion turbines shall be operated in compliance with all applicable requirements of 40 CFR Part 60, Subpart GG, Standards of Performance for Stationary Gas Turbines.

Except where this permit is more restrictive than the applicable requirement, the combustion turbine generating station shall comply with all applicable provisions of 40 CFR Part 75.

Title V Condition

Combustion turbine emissions are limited by proper operation and maintenance.

***Note:*** *It is the practice of the Virginia Department of Environmental Quality to require in permits conditions that the emission sources, such as fuel burning equipment, be operated in a proper manner. The proper operation stipulation was added to the federal operating permit for completeness.*

## Monitoring and Recordkeeping

The condition numbers listed below are from the Minor NSR permit issued on March 5, 2013 and conditions are also from NSPS, Subpart GG.

Conditions 7 and 25, A continuous monitoring system is required to be installed and operated (as approved by the DEQ) to indicate/determine and record the hourly fuel consumption and the ratio of water to fuel oil being fired in the simple cycle combustion turbines. Records are required to be maintained and utilized to determine compliance with $NO_x$ emission limits and/or relevant emission standards.

Conditions 8, Requires monitoring and recordkeeping of the sulfur content of the natural gas being fired in the turbines in accordance with NSPS, Subpart GG.

Conditions 9, Relieves the permittee of the requirement of monitoring the nitrogen content of the natural gas being fired in the turbines in accordance with the US EPA custom fuel-monitoring schedule.

Condition 31, Requires specific monitoring and recordkeeping in order to minimize the duration and frequency of excess emissions associated with the turbines.

Condition 26, Requires recordkeeping of emission data and operating parameters as necessary to demonstrate compliance with the permit including the following:

- Continuous megawatt generation rate during the period in which the Inlet Air Conditioning Systems and Wet Compression Systems are in operation.
- Hourly, monthly, and annual consumption of natural gas and fuel oil. Annual consumption to be calculated monthly as the sum of each consecutive 12 month period. Ratio of water to fuel for each fuel being fired shall accompany the hourly consumption record.
- Tests of the sulfur content of natural gas being fired in accordance with subpart GG of the NSPS and the US EPA custom fuel monitoring schedule, approved on July 2, 1998.

- Tests for the sulfur and nitrogen content of all shipments (as defined in Appendix A) of fuel oil delivered to the facility.
- Calculations to demonstrate compliance with the fuel limitation requirements for any annual period when fuel oil was fired.
- Monthly and annual calculations of nitrogen oxides, sulfur dioxide, and carbon monoxide emissions based on water/fuel ratios, monitoring and fuel analysis data, annual emissions calculated monthly as the sum of each consecutive 12 month period.
- Results of all stack tests, visible emission evaluations and performance evaluations.
- A record of opacity observations, including corrective action or Method 9 observation results.
- Continuous monitoring system calibrations and calibration checks.
- Scheduled and unscheduled maintenance of the turbines and associated monitoring systems.
- Records of operator training.

Title V Condition

In the event that any of the turbines are operated for a total of more than 20 cumulative hours during a calendar year, the permittee is required to demonstrate compliance with the opacity limits by conducting visible emissions observations (VEO's) on the corresponding turbine exhaust according to the following schedule:

- at least one VEO per calendar year.
- at least one VEO every 200 hours of turbine operation.

Each VEO shall be performed for a sufficient period of time to identify the presence of visible emissions. If no visible emissions are observed, no action shall be required. However, if the visible emissions are observed, a 6-minute Method 9 visible emission evaluation (VEE) shall be conducted. If the average opacity exceeds 10%, modifications and/or repairs shall be performed to correct the problem and the corrective measures shall be recorded. If the opacity problem persists, an 18-minute VEE shall be performed to determine compliance with the 30% opacity limit.

***Note:*** *The permit content requirements of the regulations for federal operating permits, 9 VAC 5-80-110, state that the permit should include conditions for periodic monitoring sufficient to demonstrate that the facility is in compliance with the limits of the permit.*

Compliance Assurance Monitoring (CAM) Requirements

The CAM Plan for $NO_X$ was previously issued in the facility's Title V permit. The four turbines each have water injection as a means to control $NO_X$ emissions, are subject to an emission limitation, and have uncontrolled $NO_X$ emissions that are above major source thresholds. They are not exempt as stated in 40 CFR 64.2(b)(2) since they are not "municipally-owned" (i.e. not township or county/city owned). All boilerplate CAM conditions were included in the Title V permit. The permittee shall monitor, operate, calibrate and maintain the water injection controlling the simple cycle combustion turbines according to the following:

| Monitoring, Frequency, Records | Performance Criteria | Indicator Range; Averaging Period |
|---|---|---|
| • Continuously monitor fuel consumption and the water-to-fuel ratio.<br>• Records shall be collected by a computerized system. The system shall collect and retain all relevant data. | • Fuel and water flow meters to have minimum accuracy of 5% and to be calibrated prior to each stack testing event. | • Indicator range: Shown in the table below.<br>• Excursion: Water-to-fuel ratio averaged over a 1-hour block period outside the indicator range.<br>• Data points shall be collected every minute, at a minimum, averaged over a 1-hour block period. |

| Indicator Range for Water-to-Fuel Ratio | |
|---|---|
| Load, percent | Water-to-Fuel Ratio Indicator Range |
| 50 | Greater than 0.20 |
| 75 | Greater than 0.30 |
| 100 | Greater than 0.50 |

The indicator range for the water-to-fuel ratio was developed from the results of recent and historical stack test data (including the facility's 1990 initial stack test done in accordance with NSPS, Subpart GG). The ranges were adjusted during this renewal process to reflect recent information. Operation of the water injection controls and combustion turbines in a manner that each indicator is maintained within the appropriate range will provide a reasonable assurance of compliance with the $NO_X$ emission limits. This CAM Plan is very consistent with/similar to other turbine facilities controlling $NO_X$ emissions with water injection (Reg. # 11348 and 50336) that have already issued their CAM Plan in the facility's Title V permit.

Appendix A

This appendix includes a description of fuel oil transfer. This appendix is cited in condition 10 of the minor NSR permit issued on 3/5/2013 and the appendix is attached to that permit.

No. 2 Fuel Oil Transfers – Darbytown Power Station

Station Process: The station receives fuel oil by truck transport where the fuel oil from the trucks is transferred into one of the station's two 3,125,000 gallon tanks. Prior to receiving oil one of the fuel oil tanks is identified as the receiving tank and is isolated from service per the station's operating procedure. The tank is valved and tagged closed until the "shipment" is completed and the tank is sampled and analyzed per ASTM methods.

Once the station reviews the fuel oil analyses and confirms that the fuel oil quality complies with the Title V air permit limitations then the fuel oil tank is released for service. This methodology is in accordance with 40 CFR 60 Subpart GG. Copies of the analyses along with the truck manifests and associated volumes are maintained at the station.

Fuel Oil 'Shipment' Definition: A 'shipment' or 'transfer' is a series of truck transport loads of oil. The source of oil may be a Dominion or a vendor owned source. Prior to any fuel movement within the Dominion system the Dominion Fuels Contracts Group assures the oil meets each station's fuel oil quality regulatory requirements.

### Testing

Testing of the fuel oil loaded to the storage tanks to demonstrate compliance with sulfur and nitrogen content requirements of NSPS Subpart GG is to occur each time that fuel is transferred to the storage tanks. The test method for sulfur content is ASTM D2880 and for nitrogen content is the current ASTM approved method. Alternative methods may be utilized upon prior approval.

Testing of the turbines to demonstrate compliance with the nitrogen oxide emission limits specified in this permit is to occur on 3 of the 8 turbines at least once every 20 calendar quarters. Testing must be conducted as defined in 40 CDR Part 75 Appendix E.2.2. This testing condition was updated to allow representative testing among 8 identical permitted turbines at Dominion Gravel Neck and Darbytown facilities (Reg. No. 50336 and 50997 respectively) if the permittee can demonstrate the turbines are low mass emission units (LMEs) and that all the turbines are identical. The representative testing is in accordance with 40 CFR 75.19(c)(1)(iv)(B) and (B)(1). A LME testing is also required. LME testing is due before the end of the next cycle which ends in 2013 at Dominion Gravel Neck. Testing of the turbines is to continue in a selection process so that no individual turbine goes untested before repeating on the same turbine in subsequent years. This new testing condition was incorporated in the Dominion Gravel Neck Title V permit which has been issued.

Visible emission evaluations from the turbines to demonstrate compliance with the visible emission limits specified in this permit is to occur upon request of DEQ. Test details are to be arranged with DEQ.

Any additional testing on the turbines is required to be conducted in accordance with the appropriate test methods and in accordance with procedures approved by DEQ.

### Reporting

The permit includes quarterly report requirements of excess emissions.

## DEGREASING OPERATIONS EMISSION UNIT APPLICABLE REQUIREMENTS – [Emission Unit: ES-5]

### Limitations

Volatile organic compound (VOCs) emissions from the use of cold cleaner is limited through the use of a control method that will remove, destroy or prevent the discharge into the atmosphere of at least 85% by weight of VOCs.

VOC emissions are limited through the use of covers or enclosed remote reservoirs, drainage to collect and return solvent to a closed container or solvent cleaning machine, a label on the ES-5 summarizing the operating procedures, and through the use of a solid, fluid stream of solvent spray

VOC emissions are limited through the use of good operating practices.
VOC emissions are limited by the disposal of the waste solvent through the use of reclamation or incineration.

### Monitoring and Recordkeeping

The Title V permit requires recordkeeping of emission data and operating parameters as necessary to demonstrate compliance with the permit including records documenting compliance with the limitation requirements of the permit.

## FACILITY WIDE REQUIREMENTS

### Limitations

Total annual emissions from the electric generating facility are limited as follows:

| | | |
|---|---|---|
| Particulate Matter | 9.5 | tons/yr |
| PM-10 | 9.5 | tons/yr |
| Sulfur Dioxide | 193.2 | tons/yr |
| Nitrogen Oxides (as $NO_2$) | 245.5 | tons/yr |
| Volatile Organic Compounds | 4.8 | tons/yr |
| Carbon Monoxide | 32.6 | tons/yr |

### Testing

The permitted facility is required to be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.

Any additional testing is required to be conducted in accordance with the appropriate test methods and in accordance with procedures approved by DEQ.

## STREAMLINED REQUIREMENTS

The installation requirement portion of Condition 7 of the March 5, 2013 Minor NSR was removed because the continuous monitoring system was installed as required prior to the performance testing that was conducted from May 21 through May 24, 1990.

The testing condition associated with the turbines to demonstrate compliance with nitrogen oxide emission limits when using wet compression systems was removed from the Title V permit because the testing was conducted on June 18 and 19, 2008.

The requirement that the fuel oil storage tanks operate in compliance with 40 CFR Part 60, Subpart Kb was removed from the Title V permit. The two permitted storage tanks (3,177,000 gallon) for No. 2 distillate oil were previously subject to NSPS, Subpart Kb recordkeeping requirements. Subpart Kb previously required storage tanks of this size and storage type to maintain and make available on site drawings and specifications documenting the dimensions and capacity of each tank. Subpart Kb no longer includes this requirement therefore; the tanks are no longer applicable to this Subpart.

The $NO_x$ Budget Trading Program Requirements were removed from the Title V permit because the Clean Air Interstate Rule Requirements supersede these requirements.

## INSIGNIFICANT EMISSION UNITS

The insignificant emission units are presumed to be in compliance with all requirements of the Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Insignificant emission units include the following:

| Emission Unit No. | Emission Unit Description | Citation | Pollutant(s) Emitted (9 VAC 5-80-720 B) | Rated Capacity 9 VAC 5-80-720 C) |
|---|---|---|---|---|
| IS-1 | Two No. 2 Fuel Oil Storage Tanks | 9 VAC 5-80-720B | VOC | 3,125,000 gallons each |
| IS-2 | Three Oil/Water Separators | 9 VAC 5-80-720B | VOC | 350 to 2000 gallons |
| IS-3 | Natural Gas Heaters | 9 VAC 5-80-720C | PM, CO, VOC, $SO_2$, $NO_X$ | 6.87 MMBtu/hr total |
| IS-4 | Turbine Glycol Cooling Systems (4) | 9 VAC 5-80-720B | VOC, HAP | Less than 1000 gallons total |
| IS-5 | Turbine Lube Oil Systems (4) | 9 VAC 5-80-720B | VOC | Less than 15,000 gallons total |

The citation criteria for insignificant activities are as follows:

9 VAC 5-80-720 A - Listed Insignificant Activity, Not Included in Permit Application
9 VAC 5-80-720 B - Insignificant due to emission levels
9 VAC 5-80-720 C - Insignificant due to size or production rate

## INAPPLICABLE REQUIREMENTS

| Citation | Title of Citation | Description of Applicability |
|---|---|---|
| 9 VAC 5-40-900 | Particulate Matter Standard for Fuel Burning Equipment | The combustion turbines must meet the NSPS Subpart GG requirement since it is more stringent than Rule 4-8. |
| 9 VAC 5-40-930 | Sulfur Dioxide Standard for Fuel Burning Equipment | The combustion turbines must meet the NSPS Subpart GG requirement since it is more stringent than Rule 4-8. |
| 9 VAC 5-40-940 | Visible Emission Standard for Fuel Burning Equipment | The combustion turbines must meet the BACT requirement since it is more stringent than Rule 4-8. |
| 40 CFR 60, Subpart Kb | Standards of Performance for VOC Storage Vessels including Petroleum Liquid Storage Vessels (After July 23, 1984) | This Subpart does not apply to the two No.2 distillate oil storage tanks (IS-1) because it no longer contains the recordkeeping requirements |

| | | |
|---|---|---|
| | | for this tank type. |
| 40 CFR 60, Subpart KKKK | Standards of Performance for Stationary Combustion Turbines | This Subpart does not apply to the combustion turbines since the construction of these units commenced before February 18, 2005. |
| 40 CFR 43, Subpart T | National Emission Standards for Halogenated Cleaning | This Subpart does not apply to the degreasing operations (ES-5) because halogenated products are not used. |
| 40 CFR 63, Subpart YYYY | National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines | This Subpart does not apply to the combustion turbines since they are considered existing units and are exempt pursuant to 40 CFR 63.6090(b)(4). |

## GENERAL CONDITIONS

The permit contains general conditions required by 40 CFR Part 70 and 9 VAC 5-80-110 that apply to all Federal-operating permitted sources. These include requirements for submitting semi-annual monitoring reports and an annual compliance certification report. The permit also requires notification of deviations from permit requirements or any excess emissions.

### Comments on General Conditions

#### Permit Expiration

This condition refers to the Board taking action on a permit application. The Board is the State Air Pollution Control Board. The authority to take action on permit application(s) has been delegated to the Regions as allowed by □□§2.2-604 and □§10.1-1185 of the *Code of Virginia,* and the "Department of Environmental Quality Agency Policy Statement No. 2-09".

This general condition cite(s) the Article(s) that follow(s):
Article 1 (9 VAC 5-80-50 et seq.), Part II of 9 VAC 5 Chapter 80. Federal Operating Permits for Stationary Sources

This general condition cites the sections that follow:
9 VAC 5-80-80. Application
9 VAC 5-80-140. Permit Shield
9 VAC 5-80-150. Action on Permit Applications

#### Failure/Malfunction Reporting

Section 9 VAC 5-20-180 requires malfunction and excess emission reporting within four hours of discovery. Section 9 VAC 5-80-250 of the Title V regulations also requires malfunction reporting; however, reporting is required within two days. Section 9 VAC 5-20-180 is from the general regulations. All affected facilities are subject to section 9 VAC 5-20-180 including Title V facilities. Section 9 VAC 5-80-250 is from the Title V regulations. Title V facilities are subject to both sections. A facility may make a single report that meets the requirements of 9 VAC 5-20-180 and 9 VAC 5-80-250. The report must be made within four daytime business hours of discovery of the malfunction.

**Permit Modification**

This general condition cites the sections that follow:
9 VAC 5-80-50. Applicability, Federal Operating Permit For Stationary Sources
9 VAC 5-80-190. Changes to Permits.
9 VAC 5-80-260. Enforcement.
9 VAC 5-80-1100. Applicability, Permits For New and Modified Stationary Sources
9 VAC 5-80-1605. Applicability, Permits For Major Stationary Sources and Modifications Located in Prevention of Significant Deterioration Areas
9 VAC 5-80-2000. Applicability, Permits for Major Stationary Sources and Major Modifications Locating in Nonattainment Areas

**Malfunction as an Affirmative Defense**

The regulations contain two reporting requirements for malfunctions that coincide. The reporting requirements are listed in sections 9 VAC 5-80-250 and 9 VAC 5-20-180. The malfunction requirements are listed in General Condition 62 and General Conditions 80-83. For further explanation see the comments on General Condition 62.

## CLEAN AIR INTERSTATE RULE (CAIR) REQUIREMENTS

The facility is subject to federal CAIR regulations and the Title V permit includes the CAIR General Condition Requirements to address this.

**STATE ONLY APPLICABLE REQUIREMENTS -** No state only applicable requirements apply to this facility.

**FUTURE APPLICABLE REQUIREMENTS -** No Future Applicable Requirements have been identified for this facility.

## GREENHOUSE GAS (GHG) REQUIREMENTS

Title V Greenhouse Gas Tailoring Rule, Phase 1, currently 40 CFR Parts 51, 52, 70 and 71, do not apply to the facility as it is an existing source not currently subject to PSD for any pollutant. The facility identified that it is major for GHGs however there are no applicable GHG permitting requirements.

## CONFIDENTIAL INFORMATION

The permittee did not submit a request for confidentiality. All portions of the Title V application are suitable for public review.

## PUBLIC PARTICIPATION

The proposed permit was placed in public notice in the Style Weekly from
March 27, 2013 to April 26, 2013. The permit underwent concurrent review by EPA. The EPA review period ended on May 6, 2013. No comments were received in this office during the Public Comment Period.